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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,552	12/11/2003	Bradley G. Thompson	16596-006003	2421
26181	7590	02/24/2005	EXAMINER	
FISH & RICHARDSON P.C. 3300 DAIN RAUSCHER PLAZA MINNEAPOLIS, MN 55402			LI, BAO Q	
			ART UNIT	PAPER NUMBER
			1648	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,552

Applicant(s)

THOMPSON ET AL.

Examiner

Bao Qun Li

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/11/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other; _____.

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DETAILED ACTION

Preliminary amendment filed on 12/11/2003 has been acknowledged. Claims 1-26 have been canceled. New claims 27-35 are added. Claims 27-35 are pending and considered by the examiner.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 12/11/2003 is being considered by the examiner and signed.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 27-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9, 14-15, 18, 20 of U.S. Patent No. 6,528,305B2. Although the conflicting claims are not identical, they are not patentably distinct from each other in view of the disclosure of Natalie et al. (Virus Research 1998, Vol. 54, pp. 225-235).

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4. An obvious-type double patenting rejection is appropriate where the conflict claims are not identical, but an examined application claim is not patentably distinct from the reference claim(s) because the examined claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g. *Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985).

5. In the instant case, Claims 27-35 and claims 1-9, 14-15 and 18-20 are both directed to methods of culturing a reovirus comprising infecting human kidney embryo 293 (HEK293) cells with a reovirus with multiplicity of virus selecting from group consisting of 10 or less, 5 or less or 1 or less or 0.5 or 0.1 in suspension or adherent culture, followed by freezing the harvest virus for storage by lyophilizing (See claims 27, 31-35 over claims 1-9 and 14-15, 18, 20). While the methods differ in that the current application is directed to using the method for culturing a reassorted virus from the reassortment between different human reoviruses from different subtype and isolation selected from a group consisting of Lang strain, the Jones strain, the Dearing strain and Abney strain. Whereas, the method of conflict claims uses the method for culturing a non-assorted human serotype 3 reovirus Dearing strain, Natalie et al. teach that family of reovirus lacks of superinfection exclusion property. The reassorted reovirus can be produced as a routine method by co-infecting the cell with two reovirus serotypes together, and later isolating the reassortant progeny without any influence of virus replication property in the cell line. The percentage of progeny that indeed reassort, depend on the ability of parental viruses to replicate. For example, T1L and T3D are significantly more efficient for replication in L9292 cells than the virus serotype T2J. The T1L is strain Lang, and T3D is human serotype 3, Dearing strain (See last paragraph on page 233). Since growing a reassorted virus does not change the replication property in the same cell line used for culturing the parental virus, it would have been obvious to produce the reassorted reovirus in the same cell line under the same condition for growing the parental virus. One having ordinary skill in the art would have been motivated to adapt the method of claims 1-9, 14, 15, 19 and 20 of US Patent No.

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6,528,305 B2 used for culturing the parental strain of human reovirus serotype 3, Dearing strain to grow its reassorted progeny virus in view teaching by Natalie.

6. Due to absence of unexpected result, the claimed method is considered to be obvious over the reference claims 1-9, 14, 15, 18 and 20 of US patent No. 6,528,305 B2.


Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Qun Li whose telephone number is 571-272-0904. The examiner can normally be reached on 7:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Bao Qun Li
2/15/2005